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Review of Fatal Injuries in the Petroleum Industry for 1985

Statistics Department

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53RD ANNUAL REVIEW OF FATAL INJURIES AS REPORTED BY THE PETROLEUM INDUSTRY TO THE AMERICAN PETROLEUM INSTITUTE FOR 1985

ON-DUTY FATALITIES

One hundred and thirty four oil and gas companies and their subsidiaries, employing 431,000 workers, reported 23 on-duty fatal accidents during the year 1985. This is equivalent to one fatality for every 18,730 workers employed, compared with 8,373 workers employed in 1984.

Companies submitted detailed information on the causes of 12 of the fatal on-duty accidents. This information is reviewed herein. A decrease occurred in the number of deaths where motor vehicles were involved, with 1 reported for 1985 compared with 6 in 1984.

Fatal on-duty accidents for 1985 are summarized, by functions and causes, and are compared with similar data for 1984 in Table I.

TABLE I

Fatalities by Functions and Causes, Years 1985 and 1984

Function	Cases Reported		Motor Vehicle		Struck by Equipment		Other Trans.		Fall		Fires and Expl.		Toxic Gas or Liquid		Drowning		Electroc.		Caught In or Between		Other	
	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984
Total	12	47	1	6	2	5	3	3	0	3	4	24	0	1	0	0	1	3	0	1	1	1
Exploration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	3	13	1	3	0	2	1	3	0	1	1	1	0	0	0	0	0	2	0	1	0	0
Gas Proc.	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Drilling	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Petr. Mfg.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Refining	1	22	0	0	0	0	0	0	0	0	1	20	0	1	0	0	0	0	0	0	0	1
Mrkt.-Whole	1	4	0	1	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Mrkt.-Ret.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pipe.-Liq.	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Pipe.-Gas	0	3	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar.-Tank.	1	3	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Mar.-Inl.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R & D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gen. Serv.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Admi.& Oth.	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PRODUCTION

MOTOR VEHICLE

o The employee was enroute to a service rig on a state highway at the posted speed of 55 mph when an elderly woman disregarded a stop sign on a crossing side road. The woman was traveling at 35 to 45 mph at the time her vehicle struck the employee's. The investigating Department of Public Safety officers reported that the employee did everything reasonable to avoid the collision. The woman died at the scene, while the employee died twelve hours later. Both victims were wearing seatbelts.

HELICOPTER CRASH

o One employee was killed when a helicopter took off from a heliport, flew into the water and immediatly overturned. The cause was attributed to pilot error.

FIRE AND EXPLOSION

o A gas plant operator was attempting to replace a compressor discharge valve and failed to vent high pressure gas from the cylinder. When the valve was removed, a flash fire resulted and the employee subsequently died. The cause was attributed to the employee failing to follow work procedures while working in a hazardous situation.

GAS PROCESSING

FIRE AND EXPLOSION

o A plant operator was working in the gas receiver scrubber building attempting to reduce the liquid level. The scrubber was over-pressurized and subsequently ruptured, resulting in a fire. The employee died as a result of the fire and explosion. The cause is still under investigation.

DRILLING

STRUCK BY EQUIPMENT

o A drilling floorhand was rigging up J.R.C. equipment on the rig floor. An air hoist line became disengaged from a drill pipe, allowing the drill pipe to swing into the employee and pin him. The employee died of internal injuries.

ELECTROCUTION

o A derrickman discovered a short circuit in a wire to a shaker switch and attempted to repair the problem. The power was shut off at the main panel and the wire taped. When the power was restored, the wire continued to short out. A second attempt was made to repair the short circuit without shutting off the power at the main panel. The employee was electrocuted when he touched a live contact point.

The cause of the accident was the failure to isolate all sources of incoming electrical power. Electrical wiring should not be checked or repaired prior to shutting off all power sources.

REFINING

FIRE AND EXPLOSION

o An operator loaded a petroleum product into a tank truck at approximately 30° F. above its flashpoint. The employee removed the loading spout and waited several minutes before going onto the tank truck to close the domecover of the tanker. A spontaneous fire, ignition source unknown, occurred while the employee was in close proximity to the top of the tanker. The employee subsequently died from injuries received as a result of the fire.

PREVENTION

o The material was too hot to be safely loaded. All plant operators had previously signed a notice that products were not to be loaded above their flashpoint. If the operating procedures had been followed, the accident would not have occurred. In order to prevent a future reoccurence, tank trucks are now purged with nitrogen and products loaded at least 20°F. below their tested flashpoint.

MARKETING - RETAIL

SHOOTING

o A service station attendant was killed during an armed robbery attempt. The employee failed to follow company security procedures and allowed the assailant(s) to enter the secure area of the service station.

PIPELINE - LIQUID

FIRE AND EXPLOSION

o A pumper gager was killed when a pump failure caused a fire and explosion. The cause of the accident was not identified.

MARINE - TANKER

STRUCK BY EQUIPMENT/FALL

o The crew of an ocean-going vessel was in the process of changing tow lines when a employee was struck in the chest by a tow line. The force of impact caused the employee to fall resulting in fatal head injuries.

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